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<div> <div>Drafts</div> <div> <div>BRS form</div> <div>IS&amp;R form</div> <div>Image</div> <div>Text</div> </div> </div>							
	Type	L #	Hits	Search Text	DBs	Time Stamp	Cc
1	BRS	L1	2307	(345/204 or 345/210 or 345/211 or 345/212 or 345/213 or 345/87 or 345/60).cccls.	USPAT	2002/01/07 16:18	
2	BRS	L2	914	(713/322 or 713/330 or 713/340 or 700/11 or 700/12).cccls.	USPAT	2002/01/07 16:19	
3	BRS	L3	450	2 and display	USPAT	2002/01/07 16:20	
4	BRS	L4	108	345/618.cccls.	USPAT	2002/01/07 16:20	
5	BRS	L5	2849	1 or 3 or 4	USPAT	2002/01/07 16:20	
6	BRS	L6	1469	5 and (liquid adj crystal)	USPAT	2002/01/07 16:48	
7	BRS	L7	395	6 and dc	USPAT	2002/01/07 16:22	
8	BRS	L8	529	6 and (dc or ac)	USPAT	2002/01/07 16:26	
9	BRS	L9	155	8 and delay\$	USPAT	2002/01/07 16:47	
10	BRS	L10	38788	liquid adj crystal adj display	USPAT	2002/01/07 16:49	
11	BRS	L11	6111	10 and (power adj source)	USPAT	2002/01/07 16:50	
12	BRS	L12	2087	10 and (voltage adj source)	USPAT	2002/01/07 16:50	
13	BRS	L13	7516	11 or 12	USPAT	2002/01/07 16:51	
14	BRS	L14	2855	13 and (ac or dc)	USPAT	2002/01/07 16:52	
15	BRS	L15	1006	14 and (delay or flip\$)	USPAT	2002/01/07 16:52	
16	BRS	L16	134	15 and (abnormality or rush or deterioration)	USPAT	2002/01/07 17:03	
17	BRS	L17	2	"4225847"	USPAT	2002/01/07 17:03	
18	IS&R	L18	11	((("4225847") or ("4196432") or ("4166360") or ("4073131") or ("5414443") or ("5049865") or ("5248963") or ("509172	USPAT	2002/01/07 17:16	
19	BRS	L19	124	15 and fault	USPAT	2002/01/07 17:16	
20	BRS	L20	95	19 not 16	USPAT	2002/01/07 17:16	

EAST - [default.wsp:1]

File View Edit Tools Window Help

☐ Drafts  
☐ Pending  
☒ Active

L1: (6248294) \$100997  
 L2: (0) yamaguchi-tokyo.in  
 L3: (85) yamaguchi-tetsuo.  
 L4: (12) 3 and delay  
 L5: (34) 3 and liquid  
 L6: (6) 5 and display  
 L7: (0) tetsuo-yamaguchi.i  
 L8: (0) hiroyuki-chihara.i  
 L9: (13) chihara-hiroyuki.

DBs: USPAT  
☒ Highlight all hit terms initially

☒ BRS form ☒ IS&R form ☒ Image ☒ Text

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Err
1	BRS	L1	6248294	\$100997	USPAT	2002/01/07 15:10		Truncation Overflow.	1
2	BRS	L2	0	yamaguchi-tokyo.in.	USPAT	2002/01/07 15:13			0
3	BRS	L3	85	yamaguchi-tetsuo.in.	USPAT	2002/01/07 15:28			0
4	BRS	L4	12	3 and delay	USPAT	2002/01/07 15:21			0
5	BRS	L5	34	3 and liquid	USPAT	2002/01/07 15:24			0
6	BRS	L6	6	5 and display	USPAT	2002/01/07 15:24			0
7	BRS	L7	0	tetsuo-yamaguchi.in.	USPAT	2002/01/07 15:29			0
8	BRS	L8	0	hiroyuki-chihara.in.	USPAT	2002/01/07 15:30			0
9	BRS	L9	13	chihara-hiroyuki.in.	USPAT	2002/01/07 15:39			0
10	BRS	L10	0	remmerie-guido.in.	USPAT	2002/01/07 15:40			0
11	BRS	L11	0	guido-remmerie.in.	USPAT	2002/01/07 15:40			0
12	BRS	L13	1754	guido\$.in.	USPAT	2002/01/07 15:41			0
13	BRS	L12	5	remmerie\$.in.	USPAT	2002/01/07 15:48			0
14	IS&R	L14	4	((("4166360") or ("4255847") or ("4073131")	USPAT	2002/01/07 15:49			0
15	IS&R	L15	4	((("4166360") or ("4225847") or ("4073131")	USPAT	2002/01/07 15:49			0

☒ Hits ☒ Details

Ready

NUM

L4: (108) 345/618.ccls.

4196432

☒ Highlight all hit terms initially

**BRS form**

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THE

✓ **PCWH#**

## Ready

**NLM**

patent # 5563624

1/2 LGST (1/1) - (C) LEGSTAT

PN - US 5563624 [US5563624]

AP - US 267103/94 19940623 [1994US-0267103]

DT - US-P

ACT - 19940623 US/AE-A

APPLICATION DATA (PATENT)

{US 267103/94 19940623 [1994US-0267103]}

- 19961008 US/A

PATENT

- 19970603 US/CC

CERTIFICATE OF CORRECTION

UP - 1998-37

2/2 PAST (1/1) - (C) PAST

AN - 199722-000210

PN - 5563624 A [US5563624]

DT - A (UTILITY)

OG - 1997-06-03

CO - COR

ACT - CERTIFICATE OF CORRECTION

SH - CERTIFICATE OF CORRECTION

LEVEL 1 OF 1 PATENT

5,563,624

<=2> GET 1st DRAWING SHEET OF 9

Oct. 8, 1996

Flat display device and display body driving device

CORE TERMS: driving, liquid crystal, flat, detection, module, power source,  
voltage, driver, control means, scan...

**NEXIS-NEXIS**  
**Library: PATENT**  
**File: ALL**

5,563,624 OR 5563624

**EXIS-NEXIS**  
**Library: PATENT**  
**File: CASES**

Your search request has found no CASES.

To edit the above request, use the arrow keys. Be sure to move the cursor to the end of the request before you enter it.

To enter a new search request, type it and press the ENTER key.

What you enter will be Search Level 1.

For further explanation, press the H key (for HELP) and then the ENTER key.

5,563,624 OR 5563624

**EXIS-NEXIS**  
**Library: PATENT**  
**File: JNLS**

Your search request has found no ITEMS.

To edit the above request, use the arrow keys. Be sure to move the cursor to the end of the request before you enter it.

To enter a new search request, type it and press the ENTER key.

What you enter will be Search Level 1.

For further explanation, press the H key (for HELP) and then the ENTER key.



5,563,624 OR 5563624

**EXIS-NEXIS**  
**Library: NEWS**  
**File: CURNWS**

Your search request has found no STORIES.

To edit the above request, use the arrow keys. Be sure to move the cursor to the end of the request before you enter it.

To enter a new search request, type it and press the ENTER key.

What you enter will be Search Level 1.

For further explanation, press the H key (for HELP) and then the ENTER key.

4/39/1

DIALOG(R) File 345:Inpadoc/Fam.& Legal Stat  
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10270956

Basic Patent (No,Kind,Date): WO 9120075 A1 19911226 <No. of Patents: 022>

Patent Family:

Patent No	Kind	Date	Applic No	Kind	Date
DE 69130105	C0	19981008	DE 69130105	A	19910611
DE 69130105	T2	19990121	DE 69130105	A	19910611
EP 487742	A1	19920603	EP 91910637	A	19910611
EP 872793	A1	19981021	EP 98200118	A	19910611
EP 487742	A4	19930127	EP 91910637	A	19910611
EP 487742	B1	19980902	EP 91910637	A	19910611
HK 1014597	A1	20000505	HK 98115931	A	19981228
JP 2000155554	A2	20000606	JP 200010249	A	19910611
JP 2000194312	A2	20000714	JP 200038817	A	20000216
JP 2000194335	A2	20000714	JP 200038816	A	20000216
JP 2001109424	A2	20010420	JP 2000257942	A	19910611
JP 2001109425	A2	20010420	JP 2000257943	A	19910611
JP 2001255859	A2	20010921	JP 20016848	A	20010115
JP 3123077	B2	20010109	JP 91509945	A	19910611
JP 3139495	B2	20010226	JP 200038816	A	20000216
JP 3139496	B2	20010226	JP 200038817	A	20000216
JP 3166770	B2	20010514	JP 200010249	A	19910611
KR 9604651	B1	19960411	KR 9270328	A	19920214
SG 6300562	A1	19990330	SG 9602540	A	19910611
US 5563624	A	19961008	US 267103	A	19940623
US 5903260	A	19990511	US 582771	A	19960102
WO 9120075	A1	19911226	WO 91JP785	A	19910611 (BASIC)

Priority Data (No,Kind,Date):

JP 90159416 A 19900618  
WO 91JP785 W 19910611  
EP 91910637 A3 19910611  
JP 200010249 A 19910611  
JP 2000257942 A 19910611  
JP 2000257943 A 19910611  
JP 20016848 A 20010115  
US 267103 A 19940623  
US 834295 B1 19920409  
US 582771 A 19960102  
WO 91JP785 A 19910611  
US 267103 A3 19940623

PATENT FAMILY:

GERMANY (DE)

Patent (No,Kind,Date): DE 69130105 C0 19981008

FLACHE ANZEIGETAFEL UND GERAET ZUM STEUERN VON ANZEIGEELEMENTEN  
(German)

Patent Assignee: SEIKO EPSON CORP (JP)

Author (Inventor): IMAMURA YOUICHI (JP)

Priority (No,Kind,Date): JP 90159416 A 19900618; WO 91JP785 W  
19910611

Applic (No,Kind,Date): DE 69130105 A 19910611

IPC: \* G06F-003/147; G09G-003/36

Derwent WPI Acc No: \* G 92-024626

Language of Document: German

Patent (No,Kind,Date): DE 69130105 T2 19990121

FLACHE ANZEIGETAFEL UND GERAET ZUM STEUERN VON ANZEIGEELEMENTEN  
(German)

Patent Assignee: SEIKO EPSON CORP (JP)

Author (Inventor): IMAMURA YOUICHI (JP)

Priority (No,Kind,Date): JP 90159416 A 19900618; WO 91JP785 W  
19910611

Applic (No,Kind,Date): DE 69130105 A 19910611

IPC: \* G06F-003/147; G09G-003/36

Derwent WPI Acc No: \* G 92-024626

Language of Document German  
GERMANY (DE)

Legal Status (No, Type, Date, Code, Text):

DE 69130105 P 19981008 DE REF CORRESPONDS TO (ENTSPRICHT)

DE 69130105 P 19990121 DE 8373 EP 487742 P 19981008  
TRANSLATION OF PATENT  
DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND  
HAS BEEN PUBLISHED (UEBERSETZUNG DER  
PATENTSCHRIFT DES EUROPÄISCHEN PATENTES IST  
EINGEGANGEN UND VERÖFFENTLICHT WORDEN)  
DE 69130105 P 19990930 DE 8364 NO OPPOSITION DURING TERM OF  
OPPOSITION (EINSPRUCHSFRIST ABGELAUFEN OHNE  
DASS EINSPRUCH ERHOBEN WURDE)

EUROPEAN PATENT OFFICE (EP)

Patent (No, Kind, Date): EP 487742 A1 19920603  
FLAT DISPLAYING DEVICE AND DEVICE FOR DRIVING DISPLAYING ELEMENTS  
(English; French; German)

Patent Assignee: SEIKO EPSON CORP (JP)

Author (Inventor): IMAMURA YOUICHI (JP)

Priority (No, Kind, Date): WO 91JP785 W 19910611; JP 90159416 A  
19900618

Applic (No, Kind, Date): EP 91910637 A 19910611

Designated States: (National) DE; GB

IPC: \* G09G-003/20

Derwent WPI Acc No: \* G 92-024626

Language of Document: English

Patent (No, Kind, Date): EP 872793 A1 19981021

FLAT DISPLAY DEVICE AND DISPLAY BODY DRIVING DEVICE (English; French;  
German)

Patent Assignee: SEIKO EPSON CORP (JP)

Author (Inventor): YOUICHI IMAMURA (JP)

Priority (No, Kind, Date): EP 91910637 A3 19910611; JP 90159416 A  
19900618

Applic (No, Kind, Date): EP 98200118 A 19910611

Designated States: (National) DE; GB

IPC: \* G06F-003/147; G09G-003/20; G06F-001/24

Derwent WPI Acc No: \* G 92-024626

Language of Document: English

Patent (No, Kind, Date): EP 487742 A4 19930127

FLAT DISPLAYING DEVICE AND DEVICE FOR DRIVING DISPLAYING ELEMENTS  
(English; French; German)

Patent Assignee: SEIKO EPSON CORP (JP)

Author (Inventor): IMAMURA YOUICHI (JP)

Priority (No, Kind, Date): WO 91JP785 W 19910611; JP 90159416 A  
19900618

Applic (No, Kind, Date): EP 91910637 A 19910611

Designated States: (National) DE; GB

IPC: \* G09G-003/20

Derwent WPI Acc No: \* G 92-024626

Language of Document: English

Patent (No, Kind, Date): EP 487742 B1 19980902

FLAT DISPLAYING DEVICE AND DEVICE FOR DRIVING DISPLAYING ELEMENTS  
(English; French; German)

Patent Assignee: SEIKO EPSON CORP (JP)

Author (Inventor): IMAMURA YOUICHI (JP)

Priority (No, Kind, Date): WO 91JP785 W 19910611; JP 90159416 A  
19900618

Applic (No, Kind, Date): EP 91910637 A 19910611

Designated States: (National) DE; GB

IPC: \* G06F-003/147; G09G-003/36

Derwent WPI Acc No: \* G 92-024626

Language of Document: English

EUROPEAN PATENT OFFICE (EP)

Legal Status (No, Type, Date, Code, Text):

EP 487742	P	19900618 EP AA	PRIORITY (PATENT APPLICATION)	(PRIORITAET (PATENTANMELDUNG))
		JP 90159416 A	19900618	
EP 487742	P	19910611 EP AA	PCT-APPLICATION	
		(PCT-ANMELDUNG)		
		WO 91JP785 W	19910611	
EP 487742	P	19910611 EP AE	EP-APPLICATION	
		(EUROPAEISCHE ANMELDUNG)		
		EP 91910637 A	19910611	
EP 487742	P	19920603 EP AK	DESIGNATED CONTRACTING STATES IN AN APPLICATION WITH SEARCH REPORT	(IN EINER ANMELDUNG BENANNT VERTRAGSSTAATEN)
		DE GB		
EP 487742	P	19920603 EP A1	PUBLICATION OF APPLICATION WITH SEARCH REPORT	(VEROEFFENTLICHUNG DER ANMELDUNG MIT RECHERCHENBERICHT)
EP 487742	P	19920603 EP 17P	REQUEST FOR EXAMINATION FILED	(PRUEFUNGSANTRAG GESTELLT)
		920131		
EP 487742	P	19930127 EP AK	DESIGNATED CONTRACTING STATES MENTIONED IN A SUPPLEMENTARY SEARCH REPORT	(IN EINEM ERGAENZENDEN RECHERCHENBERICHT BENANNT VERTRAGSSTAATEN)
		DE GB		
EP 487742	P	19930127 EP A4	SUPPLEMENTARY SEARCH REPORT	(ERGAENZENDER RECHERCHENBERICHT)
		921208		
EP 487742	P	19960410 EP 17Q	FIRST EXAMINATION REPORT	(ERSTER PRUEFUNGSBESCHIED)
		960222		
EP 487742	P	19980902 EP AK	DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:	(IN EINER PATENTSCHRIFT ANGEFUEHRTE BENANNT VERTRAGSSTAATEN)
		DE GB		
EP 487742	P	19980902 EP B1	PATENT SPECIFICATION	(PATENTSCHRIFT)
EP 487742	P	19981008 EP REF	CORRESPONDS TO:	(ENTSPRICHT)
		DE 69130105 P	19981008	
EP 487742	P	19981021 EP AH	DIVISIONAL APPLICATION (ART. 76) IN:	(TEILANMELDUNG (ART. 76) IN:)
		EP 872793 P		
EP 487742	P	19990825 EP 26N	NO OPPOSITION FILED	(KEIN EINSPRUCH EINGELEGT)
EP 872793	P	19900618 EP AA	PRIORITY (PATENT APPLICATION)	(PRIORITAET (PATENTANMELDUNG))
		JP 90159416 A	19900618	
EP 872793	P	19910611 EP AA	DIVIDED OUT OF	(AUSSCHIEDUNG AUS)
		EP 91910637 A3	19910611	
EP 872793	P	19910611 EP AE	EP-APPLICATION	(EUROPAEISCHE ANMELDUNG)
		EP 98200118 A	19910611	
EP 872793	P	19981021 EP AC	DIVISIONAL APPLICATION (ART. 76) OF:	(TEILANMELDUNG (ART. 76) AUS:)
		EP 487742 P		
EP 872793	P	19981021 EP AK	DESIGNATED CONTRACTING STATES IN AN APPLICATION WITH SEARCH REPORT:	(IN EINER ANMELDUNG BENANNT VERTRAGSSTAATEN)
		DE GB		
EP 872793	P	19981021 EP A1	PUBLICATION OF APPLICATION	

WITH SEARCH REPORT (VERÖFFENTLICHUNG DER  
ANMELDUNG MIT RECHERCHENBERICHT)  
EP 872793 P 19981021 EP 17P REQUEST FOR EXAMINATION  
FILED (PRUEFUNGSANTRAG GESTELLT)  
980211  
EP 872793 P 20011031 EP 17Q FIRST EXAMINATION REPORT  
(ERSTER PRUEFUNGSBESCHEID)  
20010912

HONG KONG (HK)

Patent (No,Kind,Date): HK 1014597 A1 20000505  
FLAT DISPLAYING DEVICE AND DEVICE FOR DRIVING DISPLAYING ELEMENTS  
(English)  
Patent Assignee: SEIKO EPSON CORP (JP)  
Author (Inventor): IMAMURA YOICHI  
Priority (No,Kind,Date): JP 90159416 A 19900618; WO 91JP785 W  
19910611  
Applic (No,Kind,Date): HK 98115931 A 19981228  
IPC: \* G09G; G06F  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: English

JAPAN (JP)

Patent (No,Kind,Date): JP 2000155554 A2 20000606  
FLAT-PANEL DISPLAY DEVICE AND DISPLAY DRIVE DEVICE (English)  
Patent Assignee: SEIKO EPSON CORP  
Author (Inventor): IMAMURA YOICHI  
Priority (No,Kind,Date): JP 200010249 A 19910611; JP 90159416 A  
19900618  
Applic (No,Kind,Date): JP 200010249 A 19910611  
IPC: \* G09G-003/20; G02F-001/133; G09G-003/28; G09G-003/36  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 2000194312 A2 20000714  
FLAT DISPLAY DEVICE (English)  
Patent Assignee: SEIKO EPSON CORP  
Author (Inventor): IMAMURA YOICHI  
Priority (No,Kind,Date): JP 90159416 A 19900618  
Applic (No,Kind,Date): JP 200038817 A 20000216  
IPC: \* G09G-003/20; G09G-003/28; G09G-003/36  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 2000194335 A2 20000714  
CONTROL METHOD OF FLAT DISPLAY DEVICE (English)  
Patent Assignee: SEIKO EPSON CORP  
Author (Inventor): IMAMURA YOICHI  
Priority (No,Kind,Date): JP 90159416 A 19900618  
Applic (No,Kind,Date): JP 200038816 A 20000216  
IPC: \* G09G-003/36; G02F-001/133; G09G-003/20  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 2001109424 A2 20010420  
DISPLAY ELEMENT CONTROL METHOD AND DRIVING DEVICE (English)  
Patent Assignee: SEIKO EPSON CORP  
Author (Inventor): IMAMURA YOICHI  
Priority (No,Kind,Date): JP 2000257942 A 19910611; JP 90159416 A  
19900618  
Applic (No,Kind,Date): JP 2000257942 A 19910611  
IPC: \* G09G-003/20; G02F-001/133; G09G-003/28  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 2001109425 A2 20010420  
DISPLAY ELEMENT CONTROL METHOD AND DRIVING DEVICE (English)  
Patent Assignee: SEIKO EPSON CORP  
Author (Inventor): IMAMURA YOICHI  
Priority (No,Kind,Date): JP 2000257943 A 19910611; JP 90159416 A  
19900618

Applic (No,Kind,Date): JP 2000257943 A 19910611  
IPC: \* G09G-003/20; G02F-001/133; G09F-009/00; G09G-003/36  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 2001255859 A2 20010921  
Priority (No,Kind,Date): JP 20016848 A 20010115; JP 90159416 A 19900618  
Applic (No,Kind,Date): JP 20016848 A 20010115  
IPC: \* G09G-003/36; G02F-001/133; G09G-003/20  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 3123077 B2 20010109  
Patent Assignee: SEIKO EPSON CORP  
Author (Inventor): IMAMURA YOICHI  
Priority (No,Kind,Date): WO 91JP785 W 19910611; JP 90159416 A 19900618  
Applic (No,Kind,Date): JP 91509945 A 19910611  
IPC: \* G09G-003/20; G09G-003/28; G09G-003/36  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 3139495 B2 20010226  
Priority (No,Kind,Date): JP 90159416 A 19900618  
Applic (No,Kind,Date): JP 200038816 A 20000216  
IPC: \* G09G-003/36; G02F-001/133; G09G-003/20  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 3139496 B2 20010226  
Priority (No,Kind,Date): JP 90159416 A 19900618  
Applic (No,Kind,Date): JP 200038817 A 20000216  
IPC: \* G09G-003/20; G09G-003/28; G09G-003/36  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 3166770 B2 20010514  
Priority (No,Kind,Date): JP 200010249 A 19910611; JP 90159416 A 19900618  
Applic (No,Kind,Date): JP 200010249 A 19910611  
IPC: \* G09G-003/20; G02F-001/133; G09G-003/28  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese

KOREA, REPUBLIC (KR)

Patent (No,Kind,Date): KR 9604651 B1 19960411  
FLAT DISPLAYING DEVICE AND THE DRIVING DEVICE (English)  
Patent Assignee: SEIKO EPSON K K (JP)  
Author (Inventor): IMAMURA YOICHI (JP)  
Priority (No,Kind,Date): JP 90159416 A 19900618; WO 91JP785 W 19910611  
Applic (No,Kind,Date): KR 9270328 A 19920214  
IPC: \* G09G-003/36  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Korean

SINGAPORE (SG)

Patent (No,Kind,Date): SG 6300562 A1 19990330  
FLAT DISPLAY DEVICE AND DISPLAY BODY DRIVING DEVICE (English)  
Patent Assignee: SEIKO EPSON CORP  
Author (Inventor): YOICHI IMAMURA  
Priority (No,Kind,Date): JP 90159416 A 19900618  
Applic (No,Kind,Date): SG 9602540 A 19910611  
IPC: \* G09G-003/36; G06F-003/147  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: English

UNITED STATES OF AMERICA (US)

Patent (No,Kind,Date): US 5563624 A 19961008  
FLAT DISPLAY DEVICE AND DISPLAY BODY DRIVING DEVICE (English)  
Patent Assignee: SEIKO EPSON CORP (JP)  
Author (Inventor): IMAMURA YOICHI (JP)

Priority (No,Kind,Date): US 267103 A 19940623; JP 90159416 A  
 19900618; US 834295 B1 19920409  
 Applic (No,Kind,Date): US 267103 A 19940623  
 National Class: \* 345100000; 345117000; 345904000  
 IPC: \* G09G-003/20  
 Derwent WPI Acc No: \* G 92-024626  
 Language of Document: English  
 Patent (No,Kind,Date): US 5903260 A 19990511  
 FLAT DEVICE AND DISPLAY DRIVER WITH ON/OFF POWER CONTROLLER USED TO  
 PREVENT DAMAGE TO THE LCD (English)  
 Patent Assignee: SEIKO EPSON CORP (JP)  
 Author (Inventor): IMAMURA YOUICHI (JP)  
 Priority (No,Kind,Date): US 582771 A 19960102; JP 90159416 A  
 19900618; WO 91JP785 A 19910611; US 267103 A3 19940623; US  
 834295 B1 19920409  
 Applic (No,Kind,Date): US 582771 A 19960102  
 Addnl Info: 5563624 Patented  
 National Class: \* 345211000; 364141000  
 IPC: \* G09G-005/00; G05B-011/01  
 Derwent WPI Acc No: \* G 92-024626  
 Language of Document: English

UNITED STATES OF AMERICA (US)

Legal Status (No,Type,Date,Code,Text):

US 5563624	P	19900618	US AA	PRIORITY (PATENT)
			JP 90159416 A	19900618
US 5563624	P	19920409	US AA	PRIORITY
			US 834295 B1	19920409
US 5563624	P	19940623	US AE	APPLICATION DATA (PATENT)
			(APPL. DATA (PATENT))	
			US 267103 A	19940623
US 5563624	P	19961008	US A	PATENT
US 5563624	P	19970603	US CC	CERTIFICATE OF CORRECTION
US 5903260	P	19900618	US AA	PRIORITY (PATENT)
			JP 90159416 A	19900618
US 5903260	P	19910611	US AA	PRIORITY (PATENT)
			WO 91JP785 A	19910611
US 5903260	P	19920409	US AA	PRIORITY
			US 834295 B1	19920409
US 5903260	P	19940623	US AA	PRIORITY
			US 267103 A3	19940623
US 5903260	P	19960102	US AE	APPLICATION DATA (PATENT)
			(APPL. DATA (PATENT))	
			US 582771 A	19960102
US 5903260	P	19990511	US A	PATENT
US 5903260	P	19991109	US CC	CERTIFICATE OF CORRECTION
US 5903260	P	20011009	US RF	REISSUE APPLICATION FILED
			(REISSUE APPL. FILED)	
			20010511	

WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)

Patent (No,Kind,Date): WO 9120075 A1 19911226

FLAT DISPLAYING DEVICE AND DEVICE FOR DRIVING DISPLAYING ELEMENTS  
 (English)

Patent Assignee: SEIKO EPSON CORP (JP)

Author (Inventor): IMAMURA YOUICHI (JP)

Priority (No,Kind,Date): JP 90159416 A 19900618

Applic (No,Kind,Date): WO 91JP785 A 19910611

Designated States: (National) JP; KR; US (Regional) AT; BE; CH; DE;  
 DK; ES; FR; GB; GR; IT; LU; NL; SE

Filing Details: WO 100000 With international search report

IPC: \* G09G-003/20

Derwent WPI Acc No: ; G 92-024626

Language of Document: Japanese

WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)

Legal Status (No,Type,Date,Code,Text):

WO 9120075	P	900618 WO AA	PRIORITY (PATENT)
		JP 90159416 A	19900618
WO 9120075	P	19910611 WO AE	APPLICATION DATA (APPL.
		DATA)	
		WO 91JP785 A	19910611
WO 9120075	P	19911226 WO AK	DESIGNATED STATES CITED IN A
			PUBLISHED APPLICATION WITH SEARCH REPORT
			(DESIGNATED STATES CITED IN A PUBLISHED APPL.
			WITH SEARCH REPORT)
		JP KR US	
WO 9120075	P	19911226 WO AL	DESIGNATED COUNTRIES FOR
			REGIONAL PATENTS CITED IN A PUBLISHED
			APPLICATION WITH SEARCH REPORT (DESIGNATED
			COUNTRIES FOR REGIONAL PATENTS CITED IN A
			PUBLISHED APPL. WITH SEARCH REPORT)
		AT BE CH DE DK ES FR GB GR IT LU NL SE	
WO 9120075	P	19911226 WO A1	PUBLICATION OF THE
			INTERNATIONAL APPLICATION WITH THE
			INTERNATIONAL SEARCH REPORT (PUB. OF THE
			INTERNATIONAL APPL. WITH THE INTERNATIONAL
			SEARCH REPORT)



patent # 5903260

1/4 LGST (1/1) - (C) LEGSTAT  
PN - US 5903260 [US5903260]  
AP - US 582771/96 19960102 [1996US-0582771]  
DT - US-P  
ACT - 19960102 US/AE-A  
APPLICATION DATA (PATENT)  
{US 582771/96 19960102 [1996US-0582771]}  
- 19990511 US/A  
PATENT  
- 19991109 US/CC  
CERTIFICATE OF CORRECTION  
- 20011009 US/RF  
REISSUE APPLICATION FILED  
20010511  
UP - 2001-41

2/4 CRXX (1/1) - (C) CLAIMS/RRX  
AN - 3147272  
PN - 5,903,260 A 19990511 [US5903260]  
PA - Seiko Epson Corp JP  
PT - E (Electrical)  
ACT - 20010511 REISSUE REQUESTED  
ISSUE DATE OF O.G.: 20011009  
REISSUE REQUEST NUMBER: 09/854349  
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 2775

Reissue Patent Number:

UP - 1999-44  
UACT- 2001-10-09

3/4 PAST (1/2) - (C) PAST  
AN - 200141-001490  
PN - 5903260 A [US5903260]  
DT - A (UTILITY)  
OG - 2001-10-09  
CO - REA  
ACT - REISSUE APPLICATION FILED  
SH - REISSUE APPLICATION FILED

4/4 PAST (2/2) - (C) PAST  
AN - 199945-000267  
PN - 5903260 A [US5903260]  
DT - A (UTILITY)  
OG - 1999-11-09  
CO - COR  
ACT - CERTIFICATE OF CORRECTION  
SH - CERTIFICATE OF CORRECTION

LEVEL 1 OF 1 PATENT

5,903,260

<=2> GET 1st DRAWING SHEET OF 9

May 11, 1999

Flat device and display driver with on/off power controller  
used to prevent damage to the LCD

REISSUE: Reissue Application filed May 11, 2001 (O.G. Oct. 9, 2001) Ex. Gp.:  
2775; Re. S.N. 09/854,349

CORE TERMS: display, liquid crystal, driver, voltage, scan, driving, power  
source, module, terminal, clock...

**EXIS-NEXIS**  
**Library: PATENT**  
**File: ALL**

5,903,260 OR 5903260

**LEXIS-NEXIS**  
**Library: PATENT**  
**File: CASES**

Your search request has found no CASES.

To edit the above request, use the arrow keys. Be sure to move the cursor to the end of the request before you enter it.

To enter a new search request, type it and press the ENTER key.

What you enter will be Search Level 1.

For further explanation, press the H key (for HELP) and then the ENTER key.

5,903,260 OR 5903260

**EXIS-NEXIS**  
**Library: PATENT**  
**File: JNLS**

Your search request has found no ITEMS.

To edit the above request, use the arrow keys. Be sure to move the cursor to the end of the request before you enter it.

To enter a new search request, type it and press the ENTER key.

What you enter will be Search Level 1.

For further explanation, press the H key (for HELP) and then the ENTER key.

5,903,260 OR 5903260

**NEXIS-NEXIS**  
**Library: NEWS**  
**File: CURNWS**

Your search request has found no STORIES.

To edit the above request, use the arrow keys. Be sure to move the cursor to the end of the request before you enter it.

To enter a new search request, type it and press the ENTER key.

What you enter will be Search Level 1.

For further explanation, press the H key (for HELP) and then the ENTER key.

3/39/1

DIALOG(R) File 345:Inpadoc/Fam.& Legal Stat  
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10270956

Basic Patent (No,Kind,Date): WO 9120075 A1 19911226 <No. of Patents: 022>

Patent Family:

Patent No	Kind	Date	Applic No	Kind	Date
DE 69130105	C0	19981008	DE 69130105	A	19910611
DE 69130105	T2	19990121	DE 69130105	A	19910611
EP 487742	A1	19920603	EP 91910637	A	19910611
EP 872793	A1	19981021	EP 98200118	A	19910611
EP 487742	A4	19930127	EP 91910637	A	19910611
EP 487742	B1	19980902	EP 91910637	A	19910611
HK 1014597	A1	20000505	HK 98115931	A	19981228
JP 2000155554	A2	20000606	JP 200010249	A	19910611
JP 2000194312	A2	20000714	JP 200038817	A	20000216
JP 2000194335	A2	20000714	JP 200038816	A	20000216
JP 2001109424	A2	20010420	JP 2000257942	A	19910611
JP 2001109425	A2	20010420	JP 2000257943	A	19910611
JP 2001255859	A2	20010921	JP 20016848	A	20010115
JP 3123077	B2	20010109	JP 91509945	A	19910611
JP 3139495	B2	20010226	JP 200038816	A	20000216
JP 3139496	B2	20010226	JP 200038817	A	20000216
JP 3166770	B2	20010514	JP 200010249	A	19910611
KR 9604651	B1	19960411	KR 9270328	A	19920214
SG 6300562	A1	19990330	SG 9602540	A	19910611
US 5563624	A	19961008	US 267103	A	19940623
US 5903260	A	19990511	US 582771	A	19960102
WO 9120075	A1	19911226	WO 91JP785	A	19910611 (BASIC)

Priority Data (No,Kind,Date):

JP 90159416 A 19900618  
WO 91JP785 W 19910611  
EP 91910637 A3 19910611  
JP 200010249 A 19910611  
JP 2000257942 A 19910611  
JP 2000257943 A 19910611  
JP 20016848 A 20010115  
US 267103 A 19940623  
US 834295 B1 19920409  
US 582771 A 19960102  
WO 91JP785 A 19910611  
US 267103 A3 19940623

PATENT FAMILY:

GERMANY (DE)

Patent (No,Kind,Date): DE 69130105 C0 19981008

FLACHE ANZEIGETAFEL UND GERAET ZUM STEUERN VON ANZEIGEELEMENTEN  
(German)

Patent Assignee: SEIKO EPSON CORP (JP)

Author (Inventor): IMAMURA YOUICHI (JP)

Priority (No,Kind,Date): JP 90159416 A 19900618; WO 91JP785 W  
19910611

Applic (No,Kind,Date): DE 69130105 A 19910611

IPC: \* G06F-003/147; G09G-003/36

Derwent WPI Acc No: \* G 92-024626

Language of Document: German

Patent (No,Kind,Date): DE 69130105 T2 19990121

FLACHE ANZEIGETAFEL UND GERAET ZUM STEUERN VON ANZEIGEELEMENTEN  
(German)

Patent Assignee: SEIKO EPSON CORP (JP)

Author (Inventor): IMAMURA YOUICHI (JP)

Priority (No,Kind,Date): JP 90159416 A 19900618; WO 91JP785 W  
19910611

Applic (No,Kind,Date): DE 69130105 A 19910611

IPC: \* G06F-003/147; G09G-003/36

Derwent WPI Acc No: G 92-024626  
Language of Document: German  
GERMANY (DE)  
Legal Status (No, Type, Date, Code, Text):  
DE 69130105 P 19981008 DE REF CORRESPONDS TO (ENTSPRICHT)  
  
DE 69130105 P 19990121 DE 8373 EP 487742 P 19981008  
TRANSLATION OF PATENT  
DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND  
HAS BEEN PUBLISHED (UEBERSETZUNG DER  
PATENTSCHRIFT DES EUROPÄISCHEN PATENTES IST  
EINGEGANGEN UND VERÖFFENTLICHT WORDEN)  
DE 69130105 P 19990930 DE 8364 NO OPPOSITION DURING TERM OF  
OPPOSITION (EINSPRUCHSFRIST ABGELAUFEN OHNE  
DASS EINSPRUCH ERHOBEN WURDE)

EUROPEAN PATENT OFFICE (EP)

Patent (No, Kind, Date): EP 487742 A1 19920603  
FLAT DISPLAYING DEVICE AND DEVICE FOR DRIVING DISPLAYING ELEMENTS  
(English; French; German)  
Patent Assignee: SEIKO EPSON CORP (JP)  
Author (Inventor): IMAMURA YOUICHI (JP)  
Priority (No, Kind, Date): WO 91JP785 W 19910611; JP 90159416 A  
19900618  
Applic (No, Kind, Date): EP 91910637 A 19910611  
Designated States: (National) DE; GB  
IPC: \* G09G-003/20  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: English  
Patent (No, Kind, Date): EP 872793 A1 19981021  
FLAT DISPLAY DEVICE AND DISPLAY BODY DRIVING DEVICE (English; French;  
German)  
Patent Assignee: SEIKO EPSON CORP (JP)  
Author (Inventor): YOUICHI IMAMURA (JP)  
Priority (No, Kind, Date): EP 91910637 A3 19910611; JP 90159416 A  
19900618  
Applic (No, Kind, Date): EP 98200118 A 19910611  
Designated States: (National) DE; GB  
IPC: \* G06F-003/147; G09G-003/20; G06F-001/24  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: English  
Patent (No, Kind, Date): EP 487742 A4 19930127  
FLAT DISPLAYING DEVICE AND DEVICE FOR DRIVING DISPLAYING ELEMENTS  
(English; French; German)  
Patent Assignee: SEIKO EPSON CORP (JP)  
Author (Inventor): IMAMURA YOUICHI (JP)  
Priority (No, Kind, Date): WO 91JP785 W 19910611; JP 90159416 A  
19900618  
Applic (No, Kind, Date): EP 91910637 A 19910611  
Designated States: (National) DE; GB  
IPC: \* G09G-003/20  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: English  
Patent (No, Kind, Date): EP 487742 B1 19980902  
FLAT DISPLAYING DEVICE AND DEVICE FOR DRIVING DISPLAYING ELEMENTS  
(English; French; German)  
Patent Assignee: SEIKO EPSON CORP (JP)  
Author (Inventor): IMAMURA YOUICHI (JP)  
Priority (No, Kind, Date): WO 91JP785 W 19910611; JP 90159416 A  
19900618  
Applic (No, Kind, Date): EP 91910637 A 19910611  
Designated States: (National) DE; GB  
IPC: \* G06F-003/147; G09G-003/36  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: English

EUROPEAN PATENT OFFICE (EP)

Legal Status (No, Type, No, Code, Text):

EP 487742	P	19900618	EP AA	PRIORITY (PATENT APPLICATION) (PRIORITAET (PATENTANMELDUNG))
		JP 90159416	A	19900618
EP 487742	P	19910611	EP AA	PCT-APPLICATION (PCT-ANMELDUNG)
		WO 91JP785	W	19910611
EP 487742	P	19910611	EP AE	EP-APPLICATION (EUROPAEISCHE ANMELDUNG)
		EP 91910637	A	19910611
EP 487742	P	19920603	EP AK	DESIGNATED CONTRACTING STATES IN AN APPLICATION WITH SEARCH REPORT (IN EINER ANMELDUNG BENANNT VERTRAGSSTAATEN)
		DE GB		
EP 487742	P	19920603	EP A1	PUBLICATION OF APPLICATION WITH SEARCH REPORT (VEROEFFENTLICHUNG DER ANMELDUNG MIT RECHERCHENBERICHT)
EP 487742	P	19920603	EP 17P	REQUEST FOR EXAMINATION FILED (PRUEFUNGSANTRAG GESTELLT)
		920131		
EP 487742	P	19930127	EP AK	DESIGNATED CONTRACTING STATES MENTIONED IN A SUPPLEMENTARY SEARCH REPORT (IN EINEM ERGAENZENDEN RECHERCHENBERICHT BENANNT VERTRAGSSTAATEN)
		DE GB		
EP 487742	P	19930127	EP A4	SUPPLEMENTARY SEARCH REPORT (ERGAENZENDER RECHERCHENBERICHT)
		921208		
EP 487742	P	19960410	EP 17Q	FIRST EXAMINATION REPORT (ERSTER PRUEFUNGSBESCHIED)
		960222		
EP 487742	P	19980902	EP AK	DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION: (IN EINER PATENTSCHRIFT ANGEFUEHRTE BENANNT VERTRAGSSTAATEN)
		DE GB		
EP 487742	P	19980902	EP B1	PATENT SPECIFICATION (PATENTSCHRIFT)
EP 487742	P	19981008	EP REF	CORRESPONDS TO: (ENTSPRICHT)
		DE 69130105	P	19981008
EP 487742	P	19981021	EP AH	DIVISIONAL APPLICATION (ART. 76) IN: (TEILANMELDUNG (ART. 76) IN:)
		EP 872793	P	
EP 487742	P	19990825	EP 26N	NO OPPOSITION FILED (KEIN EINSPRUCH EINGELEGT)
EP 872793	P	19900618	EP AA	PRIORITY (PATENT APPLICATION) (PRIORITAET (PATENTANMELDUNG))
		JP 90159416	A	19900618
EP 872793	P	19910611	EP AA	DIVIDED OUT OF (AUSSCHIEDUNG AUS)
		EP 91910637	A3	19910611
EP 872793	P	19910611	EP AE	EP-APPLICATION (EUROPAEISCHE ANMELDUNG)
		EP 98200118	A	19910611
EP 872793	P	19981021	EP AC	DIVISIONAL APPLICATION (ART. 76) OF: (TEILANMELDUNG (ART. 76) AUS:)
		EP 487742	P	
EP 872793	P	19981021	EP AK	DESIGNATED CONTRACTING STATES IN AN APPLICATION WITH SEARCH REPORT: (IN EINER ANMELDUNG BENANNT VERTRAGSSTAATEN)

DE GB



EP 872793 P 981021 EP A1 PUBLICATION OF APPLICATION  
WITH SEARCH REPORT (VEROEFFENTLICHUNG DER  
ANMELDUNG MIT RECHERCHENBERICHT)  
EP 872793 P 19981021 EP 17P REQUEST FOR EXAMINATION  
FILED (PRUEFUNGSANTRAG GESTELLT)  
980211  
EP 872793 P 20011031 EP 17Q FIRST EXAMINATION REPORT  
(ERSTER PRUEFUNGSBESCHEID)  
20010912

HONG KONG (HK)

Patent (No,Kind,Date): HK 1014597 A1 20000505  
FLAT DISPLAYING DEVICE AND DEVICE FOR DRIVING DISPLAYING ELEMENTS  
(English)  
Patent Assignee: SEIKO EPSON CORP (JP)  
Author (Inventor): IMAMURA YOICHI  
Priority (No,Kind,Date): JP 90159416 A 19900618; WO 91JP785 W  
19910611  
Applic (No,Kind,Date): HK 98115931 A 19981228  
IPC: \* G09G; G06F  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: English

JAPAN (JP)

Patent (No,Kind,Date): JP 2000155554 A2 20000606  
FLAT-PANEL DISPLAY DEVICE AND DISPLAY DRIVE DEVICE (English)  
Patent Assignee: SEIKO EPSON CORP  
Author (Inventor): IMAMURA YOICHI  
Priority (No,Kind,Date): JP 200010249 A 19910611; JP 90159416 A  
19900618  
Applic (No,Kind,Date): JP 200010249 A 19910611  
IPC: \* G09G-003/20; G02F-001/133; G09G-003/28; G09G-003/36  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 2000194312 A2 20000714  
FLAT DISPLAY DEVICE (English)  
Patent Assignee: SEIKO EPSON CORP  
Author (Inventor): IMAMURA YOICHI  
Priority (No,Kind,Date): JP 90159416 A 19900618  
Applic (No,Kind,Date): JP 200038817 A 20000216  
IPC: \* G09G-003/20; G09G-003/28; G09G-003/36  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 2000194335 A2 20000714  
CONTROL METHOD OF FLAT DISPLAY DEVICE (English)  
Patent Assignee: SEIKO EPSON CORP  
Author (Inventor): IMAMURA YOICHI  
Priority (No,Kind,Date): JP 90159416 A 19900618  
Applic (No,Kind,Date): JP 200038816 A 20000216  
IPC: \* G09G-003/36; G02F-001/133; G09G-003/20  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 2001109424 A2 20010420  
DISPLAY ELEMENT CONTROL METHOD AND DRIVING DEVICE (English)  
Patent Assignee: SEIKO EPSON CORP  
Author (Inventor): IMAMURA YOICHI  
Priority (No,Kind,Date): JP 2000257942 A 19910611; JP 90159416 A  
19900618  
Applic (No,Kind,Date): JP 2000257942 A 19910611  
IPC: \* G09G-003/20; G02F-001/133; G09G-003/28  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 2001109425 A2 20010420  
DISPLAY ELEMENT CONTROL METHOD AND DRIVING DEVICE (English)  
Patent Assignee: SEIKO EPSON CORP  
Author (Inventor): IMAMURA YOICHI  
Priority (No,Kind,Date): JP 2000257943 A 19910611; JP 90159416 A

19900618

Applic (No,Kind,Date): JP 2000257943 A 19910611  
IPC: \* G09G-003/20; G02F-001/133; G09F-009/00; G09G-003/36  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 2001255859 A2 20010921  
Priority (No,Kind,Date): JP 20016848 A 20010115; JP 90159416 A  
19900618  
Applic (No,Kind,Date): JP 20016848 A 20010115  
IPC: \* G09G-003/36; G02F-001/133; G09G-003/20  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 3123077 B2 20010109  
Patent Assignee: SEIKO EPSON CORP  
Author (Inventor): IMAMURA YOICHI  
Priority (No,Kind,Date): WO 91JP785 W 19910611; JP 90159416 A  
19900618  
Applic (No,Kind,Date): JP 91509945 A 19910611  
IPC: \* G09G-003/20; G09G-003/28; G09G-003/36  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 3139495 B2 20010226  
Priority (No,Kind,Date): JP 90159416 A 19900618  
Applic (No,Kind,Date): JP 200038816 A 20000216  
IPC: \* G09G-003/36; G02F-001/133; G09G-003/20  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 3139496 B2 20010226  
Priority (No,Kind,Date): JP 90159416 A 19900618  
Applic (No,Kind,Date): JP 200038817 A 20000216  
IPC: \* G09G-003/20; G09G-003/28; G09G-003/36  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 3166770 B2 20010514  
Priority (No,Kind,Date): JP 200010249 A 19910611; JP 90159416 A  
19900618  
Applic (No,Kind,Date): JP 200010249 A 19910611  
IPC: \* G09G-003/20; G02F-001/133; G09G-003/28  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Japanese

KOREA, REPUBLIC (KR)

Patent (No,Kind,Date): KR 9604651 B1 19960411  
FLAT DISPLAYING DEVICE AND THE DRIVING DEVICE (English)  
Patent Assignee: SEIKO EPSON K K (JP)  
Author (Inventor): IMAMURA YOICHI (JP)  
Priority (No,Kind,Date): JP 90159416 A 19900618; WO 91JP785 W  
19910611  
Applic (No,Kind,Date): KR 9270328 A 19920214  
IPC: \* G09G-003/36  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: Korean

SINGAPORE (SG)

Patent (No,Kind,Date): SG 6300562 A1 19990330  
FLAT DISPLAY DEVICE AND DISPLAY BODY DRIVING DEVICE (English)  
Patent Assignee: SEIKO EPSON CORP  
Author (Inventor): YOICHI IMAMURA  
Priority (No,Kind,Date): JP 90159416 A 19900618  
Applic (No,Kind,Date): SG 9602540 A 19910611  
IPC: \* G09G-003/36; G06F-003/147  
Derwent WPI Acc No: \* G 92-024626  
Language of Document: English

UNITED STATES OF AMERICA (US)

Patent (No,Kind,Date): US 5563624 A 19961008  
FLAT DISPLAY DEVICE AND DISPLAY BODY DRIVING DEVICE (English)  
Patent Assignee: SEIKO EPSON CORP (JP)

Author (Inventor): IMAMURA YOUICHI (JP)  
 Priority (No,Kind,Date): US 267103 A 19940623; JP 90159416 A  
 19900618; US 834295 B1 19920409  
 Applic (No,Kind,Date): US 267103 A 19940623  
 National Class: \* 345100000; 345117000; 345904000  
 IPC: \* G09G-003/20  
 Derwent WPI Acc No: \* G 92-024626  
 Language of Document: English  
 Patent (No,Kind,Date): US 5903260 A 19990511  
 FLAT DEVICE AND DISPLAY DRIVER WITH ON/OFF POWER CONTROLLER USED TO  
 PREVENT DAMAGE TO THE LCD (English)  
 Patent Assignee: SEIKO EPSON CORP (JP)  
 Author (Inventor): IMAMURA YOUICHI (JP)  
 Priority (No,Kind,Date): US 582771 A 19960102; JP 90159416 A  
 19900618; WO 91JP785 A 19910611; US 267103 A3 19940623; US  
 834295 B1 19920409  
 Applic (No,Kind,Date): US 582771 A 19960102  
 Addnl Info: 5563624 Patented  
 National Class: \* 345211000; 364141000  
 IPC: \* G09G-005/00; G05B-011/01  
 Derwent WPI Acc No: \* G 92-024626  
 Language of Document: English

UNITED STATES OF AMERICA (US)

Legal Status (No,Type,Date,Code,Text):

US 5563624	P	19900618	US AA	PRIORITY (PATENT)
			JP 90159416 A	19900618
US 5563624	P	19920409	US AA	PRIORITY
			US 834295 B1	19920409
US 5563624	P	19940623	US AE	APPLICATION DATA (PATENT)
			(APPL. DATA (PATENT))	
			US 267103 A	19940623
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Patent (No,Kind,Date): WO 9120075 A1 19911226

FLAT DISPLAYING DEVICE AND DEVICE FOR DRIVING DISPLAYING ELEMENTS  
 (English)

Patent Assignee: SEIKO EPSON CORP (JP)

Author (Inventor): IMAMURA YOUICHI (JP)

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WO 9120075	P	19910611	WO AE	APPLICATION DATA (APPL.
			DATA)	
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WO 9120075	P	19911226	WO AK	DESIGNATED STATES CITED IN A
				PUBLISHED APPLICATION WITH SEARCH REPORT
				(DESIGNATED STATES CITED IN A PUBLISHED APPL.
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			JP KR US	
WO 9120075	P	19911226	WO AL	DESIGNATED COUNTRIES FOR
				REGIONAL PATENTS CITED IN A PUBLISHED
				APPLICATION WITH SEARCH REPORT (DESIGNATED
				COUNTRIES FOR REGIONAL PATENTS CITED IN A
				PUBLISHED APPL. WITH SEARCH REPORT)
				AT BE CH DE DK ES FR GB GR IT LU NL SE
WO 9120075	P	19911226	WO A1	PUBLICATION OF THE
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				INTERNATIONAL APPL. WITH THE INTERNATIONAL
				SEARCH REPORT)

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